

# Weekly Report

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2015 年 9 月 6 日

In Gongan, we did several little work:

- a little improvement of last week's results. He changed the way of predict crime rate so that it became more applicable and practical. The results didn't change a lot(on the aspect of precision).
- Shi Jiahuan set up to program the results in Java, so Zhu Dandan wrote a document on logit regression. I assist her in some basic skills of ctx. And point out several mathematical errors and discussed with all the members, for better understand.
- After discussion with Shi and He, we thought that using Java to implement the regression is not applicable. Today, Zhu and Feng and Shi managed to use Java to call matlab functions. We will specify what we will do next in our report on Monday or Tuesday, so we do not write it now at the present.

Prof Wu Yingcai proposed several ideas on netease,

- relationships between behavior and networks.
- The influence of the activity of core member of a gild on the gild's development.
- Between-networks. Ego-network(the network consists of a focal node("ego") and the nodes to whom ego is directly("alters") plus the ties. Visualizations on large amount of ego-networks may help us analyse the trends of the change of the whole network. Also we can visualize on the change of the overlap of ego-networks over time.)
- Bipartite graph. To all edges,the two sides of an edge belongs to 2 different parts. Two parts made up core and none-core members. How to divide all players into 2 parts is a difficult problem.
- Community detection, which was proposed some time ago, and we may find some ideas in the beginning of the book *networks, crowds and markets*.

I began reading the book *networks, crowds and markets*. It is an interesting book, and contains lots of topics on networks. We can discover more ideas on netease game besides the ones proposed by Wu. I read 3 chapters this week, and next week I will accelerate on reading this book, at least 4 chapters, so that I can come out more ideas. The main theory the book is based on are graph theory and gambling theory, I will better understand both of them in theoretical and practical.

In coding practice, I learned some knowledge on the Objective-Oriented of javascript with the help of my

friends. The most useful concept is the “prototype”, for constructing a shared function in javascript. Since I didn’t much about this, and I was limited to traditional way of writing js so I failed to finish the very first code work: force-directed graph. Next week, I will finish at least one item of coding practice.

For some reasons, I didn’t read papers on predictive visual analysis. At the beginning of next term, we may discuss to better co-ordinates the several projects according to my curriculum schedules and I believe I can arrange myself in a better way.